



Los Angeles to Anaheim High-Speed Train Project EIR/EIS

Supplemental Alternatives Analysis

**Presented to California High-Speed Rail Authority Board
July 8, 2010**





Alternatives Analysis Process

- 2005 – Statewide Program EIR/EIS selected LOSSAN Corridor as route for LA-A Section
- June 2009 – Draft Alternatives Analysis Report Approved by Authority Board
- July 2010 – Supplemental AA Report, which modifies 2009 Draft AA Report, released





Supplemental AA Report

- Refinements to Dedicated HST Alternative (previously recommended alternative)
- Introduction of Consolidated Shared-Track Alternative. Objectives:
 - Consolidated/Rationalized Passenger Operations
 - Continued freight access in corridor
 - Reduced Right of Way Impacts
 - Reduced Capital Costs
- Options arose from extensive coordination with project stakeholders





Stakeholder Outreach

- Since 2007, more than 400 presentations and briefings reaching stakeholders:
 - Elected Officials
 - Chambers of Commerce
 - Neighborhood Councils / Homeowners Associations
 - Community and Business Organizations
 - Trade Organizations
 - Environmental Justice Groups





Technical Outreach

- Corridor Cities
 - 185 briefings, council workshops and community meetings
- Gateway Cities Technical Working Group - 5
- Gateway Cities Administrative Committee - 2
- Interagency Working Groups - 6
- OC City Managers - 3
- Scoping Meetings 3
- Stakeholder Working Groups - 2



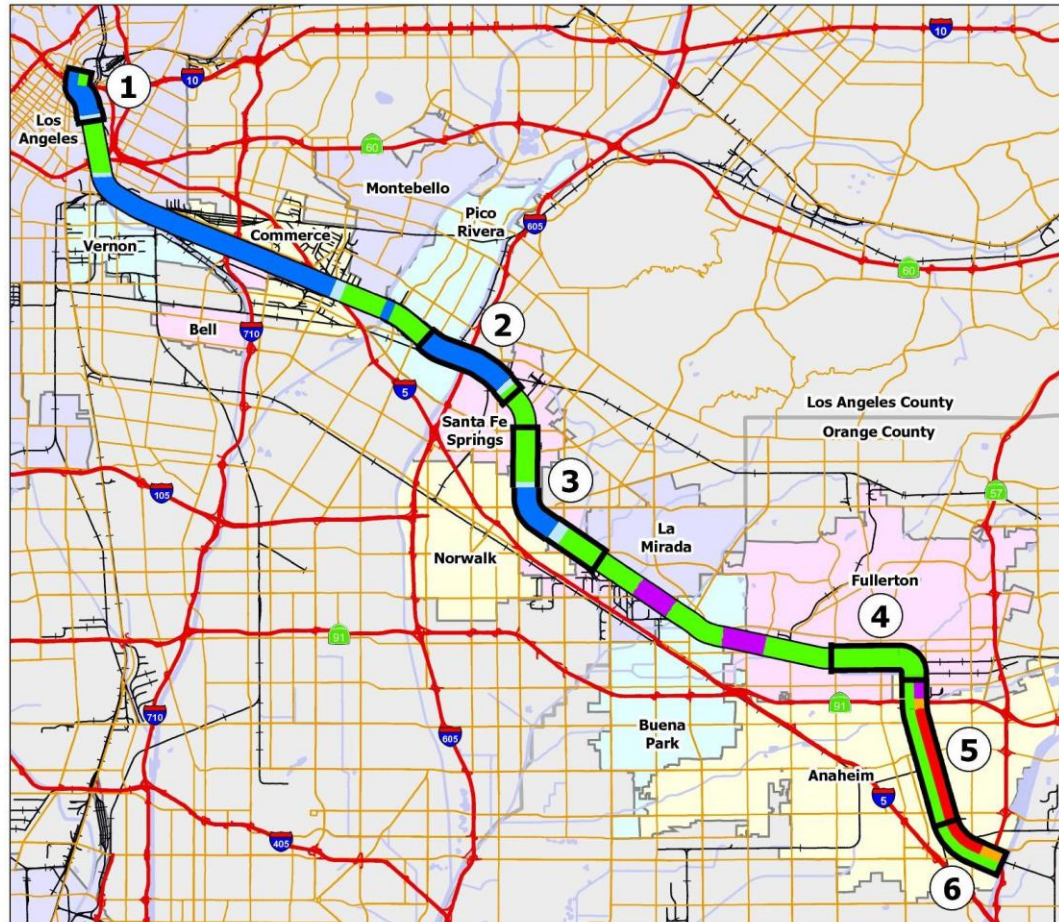


Dedicated HST Alternative

2 Dedicated
HST Tracks

4 Other
Tracks:

- Amtrak
- Metrolink
- BNSF



Sub-Sections with Design Options

1. Los Angeles Station / Alignment
 - A. LAUS Aerial HST Option
 - B. LAUS At-Grade HST Option
2. DT Junction Area
 - A. Tall Aerial Option
 - B. South Aerial Option
3. Norwalk / Santa Fe Springs Station
 - A. No HST Station Option
 - B. East HST Station Option
4. Fullerton Station
 - A. No HST Station Option
 - B. At-Grade HST Station Option
5. Anaheim
 - A. At-Grade Option
 - B. Deep Bore Tunnel Option
6. ARTIC
 - A. West At-Grade HST Station Option
 - B. Underground HST Station Option

Vertical Profile Statistics

At-Grade:	14.4 mi	48%
Fill:	1.0 mi	3%
Aerial:	7.9 mi	26%
Trench:	1.9 mi	6%
Multiple Options:	4.8 mi	16%

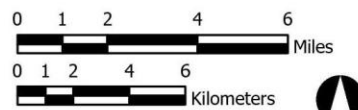
Overall Alignment Statistics

Single Design Option:	16.5 mi	55%
Multiple Design Options:	13.5 mi	45%

Source: STV Incorporated, AE LLC

June 29, 2010

California High-Speed Train Alternatives Analysis Report



Legend

Vertical Profile



Los Angeles to Anaheim Section - Vertical Profile and Design Options Dedicated HST Alternative





Consolidated Shared-Track Alternative

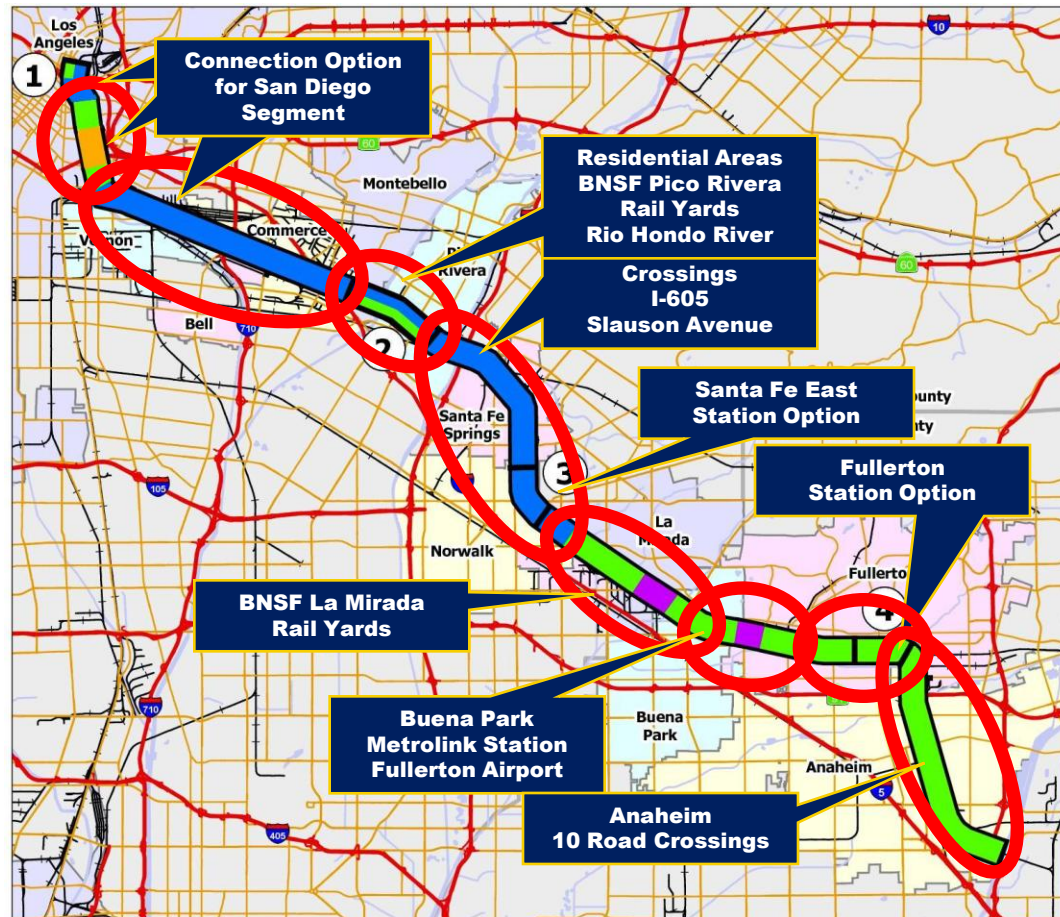
2 Passenger-Only Tracks:

- HST
- Amtrak
- Metrolink

3 Other Tracks:

- BNSF
- Amtrak
- Metrolink

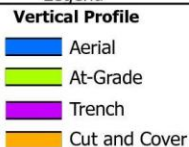
Improvements for all corridor operators



Source: STV Incorporated, AE LLC



July 6, 2010
Legend



Sub-Sections with Design Options

1. Los Angeles Union Station
 - A. LAUS Aerial HST Option
 - B. LAUS At-Grade HST Option
2. Montebello / Pico Rivera
 - A. At-Grade
 - B. Aerial
3. Norwalk / Santa Fe Springs Station
 - A. No HST Station Option
 - B. East HST Station Option
4. Fullerton Station
 - A. No HST Station Option
 - B. Aerial HST Station Option

Vertical Profile Statistics

At-Grade:	14.9 mi	49%
Aerial:	10.9 mi	35%
Trench:	1.4 mi	5%
Cut & Cover:	.9 mi	3%
Multiple Options:	2.4 mi	8%

Overall Alignment Statistics

Single Design Option:	25.7 mi	84%
Multiple Design Options:	4.8 mi	16%

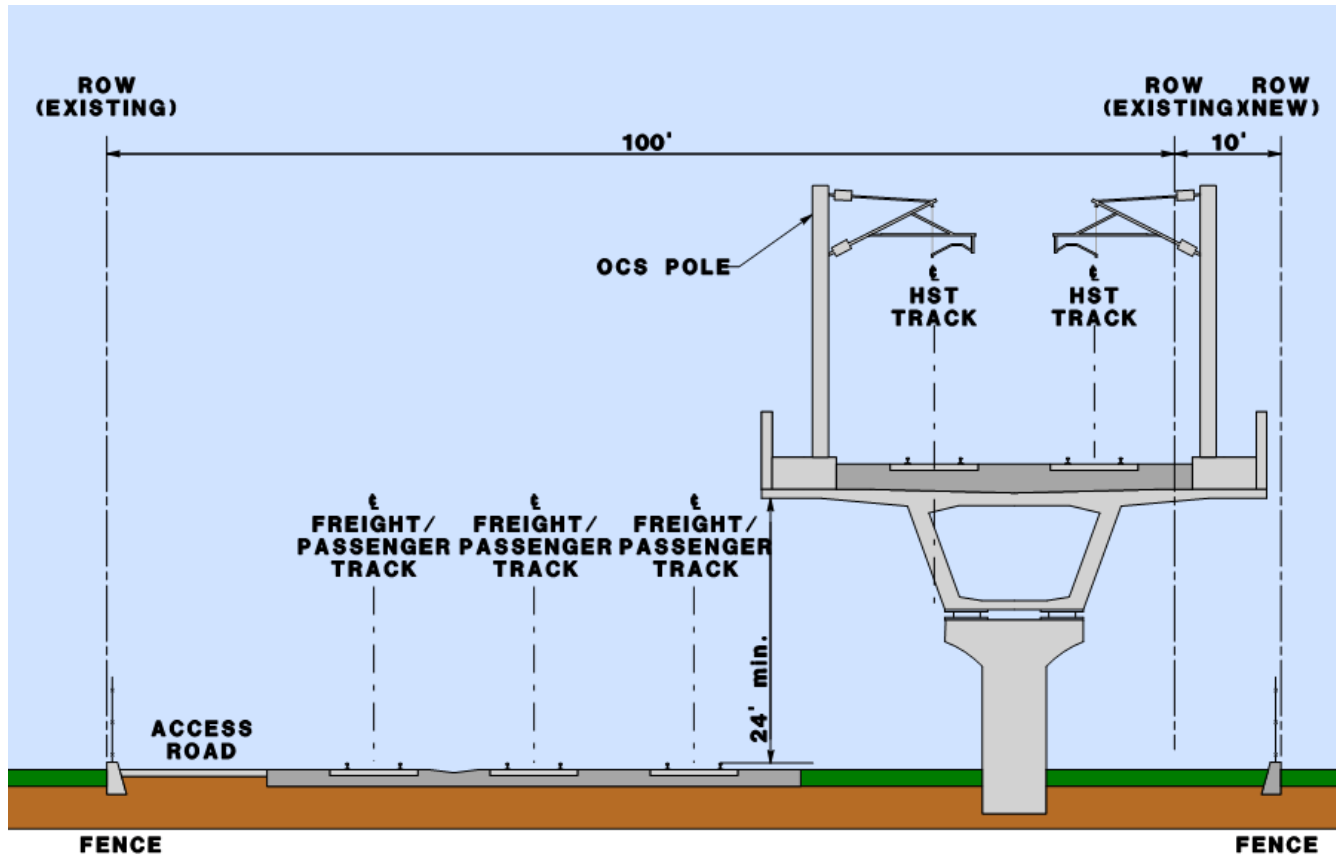
California High-Speed Train Alternatives Analysis Report

**Los Angeles to Anaheim Section -
Vertical Profile and Design Options
Consolidated Shared-Track**





Consolidated Shared-Track Alternative Aerial

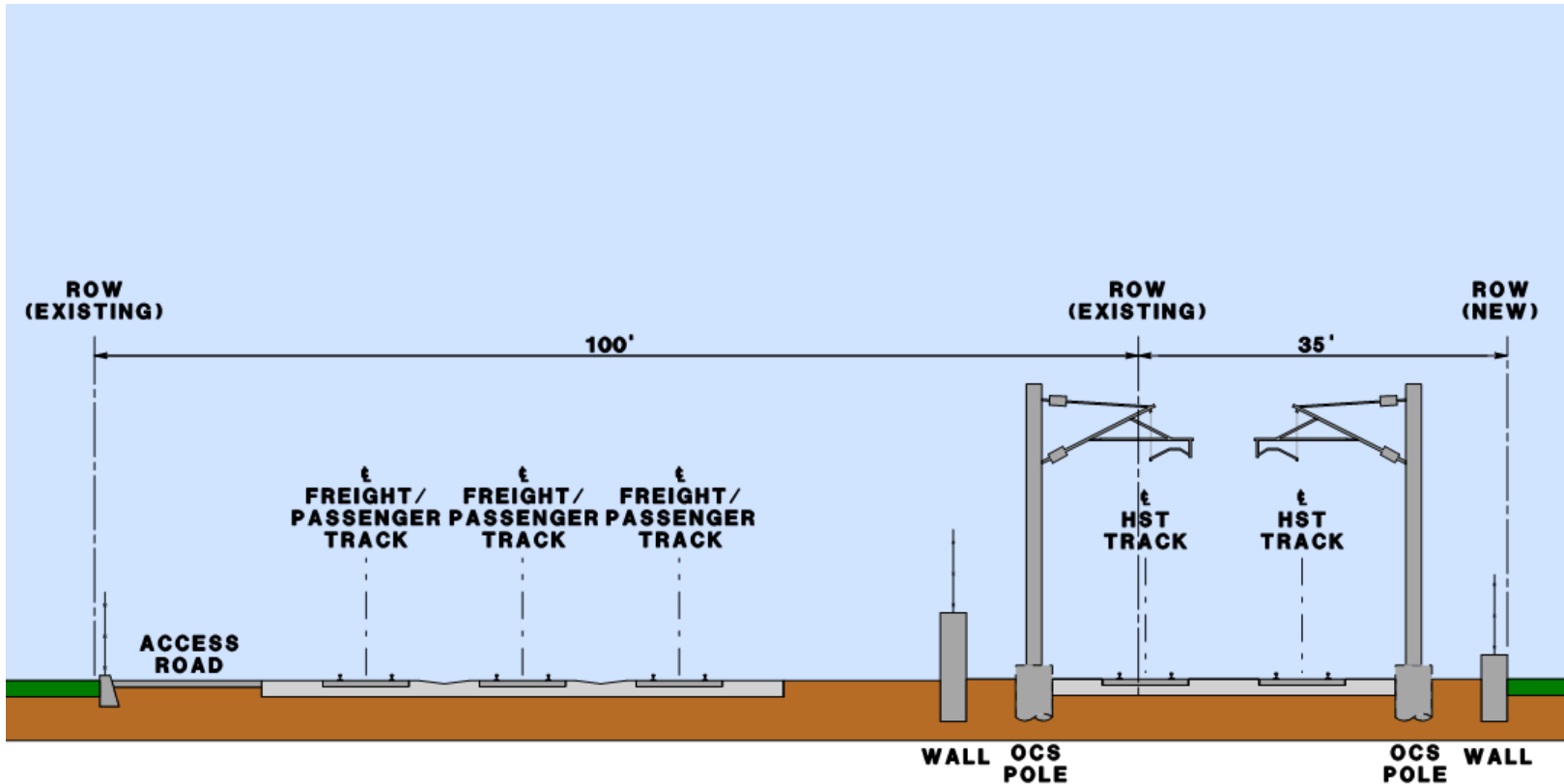


- Minimizes ROW takes by putting HST tracks above existing tracks
- Additional potential impacts from aerial structures





Consolidated Shared-Track Alternative At-Grade



- At-grade configuration possible in areas with wider ROW
- Narrower width than Dedicated HST Alternative – Five tracks instead of Six

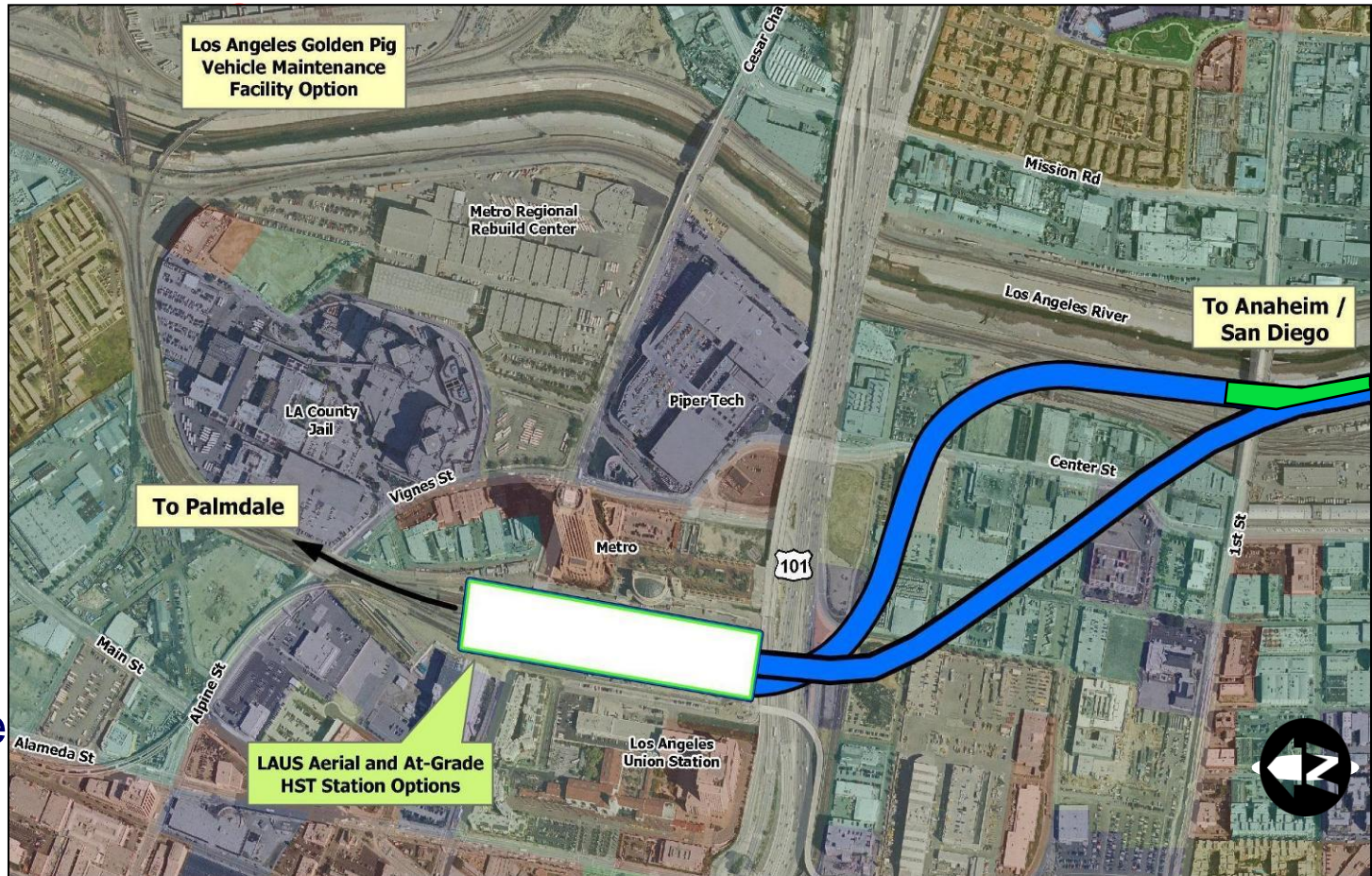




Los Angeles Station

Five HST
Station
options
examined at
Los Angeles
Union
Station:

- LAUS Aerial
- LAUS At-Grade
- LAUS Tunnel
- Vignes Aerial
- West Bank





ARTIC

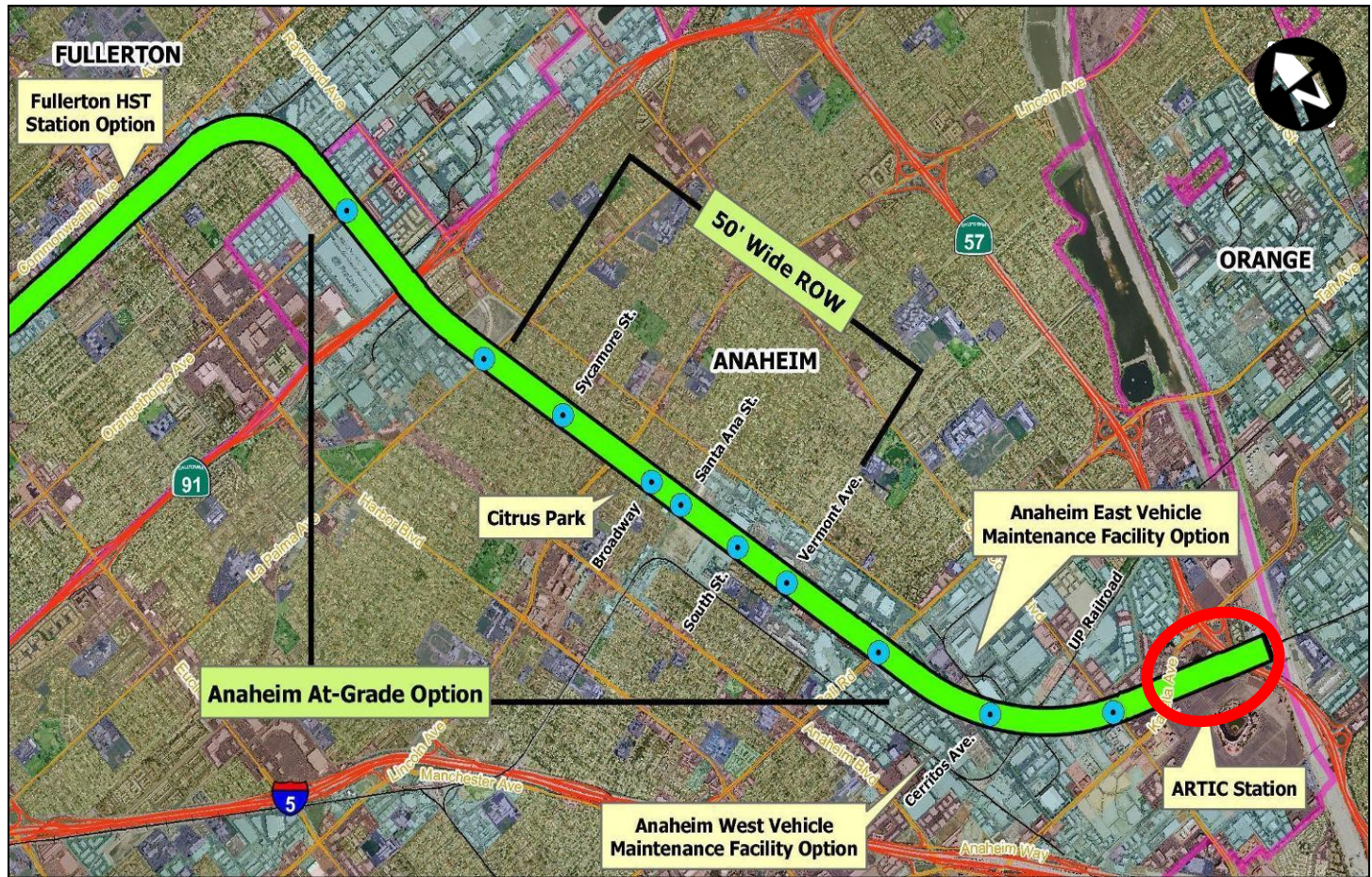
HST Station
at Anaheim
Regional
Transportation
Intermodal
Center
(ARTIC)

Three options
examined :

At-Grade
West 4 Track

At-Grade
Under 57 2
Tracks

Underground
4 Track





Vehicle Maintenance Facility Options

VMF Sites Investigated

Orange (2)
Anaheim East
Anaheim West
Fullerton Airport
Santa Fe Springs
Montebello
LA Golden Pig
Amtrak 8th Street





Timeline and Public Comment Opportunities

Ongoing Public Comment

July
2010

- Supplemental Alternatives Analysis to CHSRA Board
- To be released on www.cahighspeedrail.ca.gov and available for public comment
- Technical workshops and community meetings

Fall
2010

- Technical workshops and community meetings

Feb
2011

- Draft EIR/EIS Released
- To be released on www.cahighspeedrail.ca.gov and available for public comment
- Mandatory NEPA/CEQA Public Hearings

July
2011

- Final EIR/EIS Released

September
2011

- Record of Decision / Notice of Determination





Timeline and Public Comment Opportunities

- Staff recommends
 - Adding the Shared-Track Alternative to LA-Anaheim Draft EIR/EIS
 - Continued work with Cities to reduce impacts and improve design options
 - Continued investigation of Maintenance Facility sites

